

Applicant: Robert S. Howland
Appl. No.: 10/698,087
Examiner: Eduardo C. Robert
Docket No.: 703716.4001

Amendments to the Claims

1. (cancelled)

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (previously presented) The spinal fixation system of Claim 12 wherein each swing bolt comprises a threaded region opposite the respective first and second screws, and wherein a fastener is threadable onto the threaded region for securing the respective clamp assemblies on the swing bolts.

6. (previously presented) The spinal fixation system of Claim 12 wherein the spacer comprises a “C” shaped clip receivable around the elongate member, the clip comprising opposing edges that may be compressed around the elongate member to secure the clip to the elongate member.

7. (previously presented) The spinal fixation system of Claim 12 wherein the elongate member is at least partially curved, and the passageways in the first and second clamp assemblies are configured for receiving the elongate member.

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

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12. (currently amended) A spinal fixation system comprising
a first anchor screw assembly having a first screw having a threaded portion
configured to be screwed into a first vertebrae, the first screw assembly including a
first cylindrical swing bolt pivoted onto the first screw, and the first screw assembly
comprising a first clamp assembly comprising lower and upper clamps each having
a cylindrical opening disposed on the first swing bolt of the first screw assembly, the
lower clamp having a bottom spherical seat at the edge of the cylindrical opening
therein, the first clamp assembly having a first passage therethrough,

a second anchor screw assembly comprising a second screw having a
threaded portion configured to be screwed into a second vertebrae adjacent the first
vertebrae, the second screw assembly including a second cylindrical swing bolt
pivoted onto the second screw, and the second anchor screw assembly comprising a
second clamp assembly comprising lower and upper clamps each having a
cylindrical opening disposed on the second swing bolt of the second screw assembly,
the lower clamp having a bottom spherical seat at the edge of the cylindrical
opening therein, the second clamp assembly having a second passage therethrough,

an elongate member receivable in the first and second passages, the elongate
member comprising an exposed portion extending between the first and second
screw assemblies, and

wherein each of the first and second screws comprises a head portion opposite
the threaded portion comprising a spherical shoulder, the spherical shoulder being
adapted to mate, pivot and rotate 360° with respect to the bottom spherical surfaces
of the respective first and second clamp assemblies.

13. (previously presented) A spinal fixation system comprising
a first anchor screw assembly having a first screw having a threaded portion
configured to be screwed into a first vertebrae, the first screw assembly including a
first cylindrical swing bolt pivoted onto the first screw, and the first screw assembly
comprising a first clamp assembly having a cylindrical opening disposed on the first

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swing bolt of the first screw assembly, the first clamp assembly having a first passage therethrough,

a second anchor screw assembly comprising a second screw having a threaded portion configured to be screwed into a second vertebrae adjacent the first vertebrae, the second screw assembly including a second cylindrical swing bolt pivoted onto the second screw, and the second anchor screw assembly comprising a second clamp assembly having a cylindrical opening disposed on the second swing bolt of the second screw assembly, the second clamp assembly having a second passage therethrough,

an elongate member receivable in the first and second passages, the elongate member comprising an exposed portion extending between the first and second screw assemblies, and

a spacer securable to the exposed portion of the elongate member, the spacer having a length substantially similar to a length of the exposed portion of the elongate member for preventing the first and second anchor screw assemblies from moving substantially toward one another.

14. (currently amended) A spinal fixation system comprising
 - a first anchor screw assembly including a first screw having a threaded portion configured to be screwed into a vertebrae,
 - a cylindrical swing bolt pivoted onto the first screw,
 - the anchor screw assembly further comprising a clamp assembly having a cylindrical opening disposed on the swing bolt, and the clamp assembly including a passageway therethrough for receiving an elongate member therein, a lower end of the clamp assembly having a bottom spherical shoulder at the edge of the cylindrical opening therein, and
 - wherein the first screw comprises a head portion opposite the threaded portion comprising a spherical shoulder, the spherical shoulder being adapted to

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mate, pivot and rotate 360° with respect to the bottom spherical ~~surfaces~~ shoulder of the clamp assembly.